ENT BOOK

| imensions | | | Contents | Reference to last Measuremer |
|---|---|---|---|---|
| h | Breadth 5 | Depth 6 | 7 | 8 |
| d | on: 28-10-16 | | | |
| o | coursed stone masonry | | | |
| ter | rating joints to depth | | | |
| | cost of materials, labour, | | | |
| d | cone: | | | |
| | — | 0.60 = | 28.80 sqm | |

Rahpur ND
AE (W7)

M. A. R. 57 (Rule 116)
Measurement Book

SBR-217/16-17, dt-28/12/16
No. B

263463

Serial No. Main bill:- First and final bill:-
Name of Work Improvements to roads and drains in Amruthahalli Muniayinappa house to. Venkatesh house in ward no-07, Byatarayanapura) From To
Name of Contractor or nature of Agency Improvements to roads and drain in Amruthahalli
Date of commencement of work Sridhar house (cable road) in ward No-07 change of work

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Date of recording: 28-12-16. | | | | | | |
| | Item No-01:- | | | | | | |
| | Removing BS slab of drain and stacking: | | | | | | |
| | Qty vide page No:- 26345 → | | 594.00 sqm: | | | | |
| | @ the rate of Rs: 61.23 → | | | | | | 36370.60 |
| | Item No-04:- | | | | | | |
| | Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 1mt and average lift upto 0.5m, excavated surface levelled and sides neatly | | | | | | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | dressed, after breaking of clods: | | | | | | |
| | Qty vide page No. 263456 → 238.00 cum. | | | | | | |
| | At the rate of Rs: 79.37 → | | | | | 18890.00 | |
| | Item No: 16:- | | | | | | |
| | lead for disposal of debris | | | | | | |
| | Qty vide Item No: 04 → 238.00 cum | | | | | | |
| | At the rate of Rs: 76.34 → | | | | | 18168.92 | |
| | Item No. 02:- | | | | | | |
| | Refixing stone slabs of drains and pointing in CM 1:3. | | | | | | |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work | Nu |
|---|---|---|
| 1 | 2 | |
| | Qty vide page | |
| | At the rate of | |
| | Item. No. 05:- | |
| | Scarifying the e | |
| | of 50mm and disposal o | |
| | leads upto 1000m complet | |
| | Qty vide page. N | |
| | At the rate of Rs | |

ENT BOOK

| Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|
| | Breadth 5 | Depth 6 | 7 | 8 |
| | | → 238.00 cum. | 18890.00 | |
| | | → 238.00. cum → | 18868.92 | |
| | | | | |

...rains and pointing in CM 1:3.

M. A. R. 57 (Rule 116)
Measurement Book

No. B

Serial No. .....

Name of Work ..... From..... To..... 263464

Name of Contractor of nature of Agency .....

Date of commencement of work .....

| Date 1 | Full description, etc, of work 2 | Dimensions | | | | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | | Number 3 | Length 4 | Breadth 5 | Depth 6 | | |
| | Qty vide page No. | | 263457.00 | | → 475.20 sqm. | | |
| | At the rate of Rs: | | 79.37 → | | | | 37716.60 |
| | Item. No. 05. – | | | | | | |
| | Scarifying the existing granular road surface to a depth of 50mm and disposal of ecarified material within all lifts and leads upto 1000m complete as per specifications | | | | | | |
| | Qty vide page No: | | 263458 → | | 630.00 sqm. | | |
| | At the rate of Rs | | 19.28 → | | | | 12146.40 |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Item No 06:- | | | | | | |
| | Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery etc., | | | | | | |
| | Qty vide page No: 263458 → | | | | 630.00 | sqm | |
| | At the rate of Rs 4.70 → | | | | | | 2961.00 |
| | Item No 07:- | | | | | | |
| | Providing, laying, spreading and compacting graded stones aggregates to wet mix macadam specifications | | | | | | |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work | Nu |
|---|---|---|
| 1 | 2 | |
| | including premixing the m mix plant carriage o tory rolles to achieve th tions: | |
| | Qty vide page N | |
| | At the rate of Rs | |
| | Item No 10:- | |
| | Providing and la | |

BOOK

| ons | | Contents | Reference to last Measurement |
|---|---|---|---|
| eadth 5 | Depth 6 | 7 | 8 |
| d | with | maximum of 6 | |
| including | filling in | | |
| including | cost of all | | |
| → | 630.00 sqm. | | |
| → | | | 2961.00 |
| g | and | compacting | |
| macadam | specifications | | |

M. A. R. 57 (Rule 116)
Measurement Book

No. B

Serial No. .....
Name of Work ..... From..... To..... 263465
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date 1 | Full description, etc, of work 2 | Dimensions | | | | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | | Number 3 | Length 4 | Breadth 5 | Depth 6 | | |
| | including premixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper at site with vibratory rollers to achieve the desired density complete as per specifications: | | | | | | |
| | Qty vide page No: 263459 → | | | | 126.0 cum. | | |
| | At the rate of Rs: 1510.34 → | | | | | | 190 302.80 |
| | Item No.10:- Providing and laying in position plain cement concrete of | | | | | | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | of mix M10 with OPC cement @ 220 kgs with 40mm and down size graded granite metal coarse, well compacted, in foundation, ROM of machinery. curing complete: | | | | | | |
| | Qty vide page No: 263460 → | | | | | 2.16 cum | |
| | At the rate of Rs: 5316.82 → | | | | | | 11484.33 |
| | Item No.11:- | | | | | | |
| | providing and constructing granite / trap / basalt / size stone masonry in foundation with cement mortar 1:6, stone hammerred dressed in courses not less than 20cms high, bond stones at two m apart | | | | | | |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency ...
Date of commencement of work .....

| Date | Full description, etc, of work |
|---|---|
| 1 | 2 |
| | Qty vide |
| | At the rate |
| | Item No.12:- |
| | Providing and |
| | propping etc, and |
| | bases of columns |
| | Qty vide |
| | At the rate |

OOK

| th | Depth 6 | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|
| | | | th 40mm and down |
| | | | well compacted, in |
| | | | complete: |
| | | | 16 cum |
| | | | 11484.33 |
| | | | renite / trap / basalt / |
| | | | th cement mortar 1:6, |
| | | | not less than 20cms |

M. A. R. 57 (Rule 116)
Measurement Book

No. B

263466

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date 1 | Full description, etc, of work 2 | Dimensions: Number 3 | Length 4 | Breadth 5 | Depth 6 | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | Qty vide page No. 263460 → | | | | 17.58 cum. | | 70805-40 |
| | At the rate of Rs: 4027.58 → | | | | | | 69596.60 |
| | Item No. 12:- | | | | | | |
| | Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundation, footings, bases of columns for mass concrete including cost of materials: | | | | | | |
| | Qty vide page No. 263461 → | | | | 50.32 sqm. | | 12497.95 |
| | At the rate of Rs: 248.32 → | | | | | | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Item No. 14:- | | | | | | |
| | Providing TMT steel reinforcement for RCC works including straightening, cutting, bending, hooking, placing in position, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design. | | | | | | |
| | Qty vide page No: 263462 → | | | | | 1.74 tonne | |
| | At the rate of Rs. 82261.60 → | | | | | | 143135.18 |
| | Item No. 15:- | | | | | | |
| | Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth | | | | | | |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work | N |
|---|---|---|
| 1 | 2 | |
| | of 20mm nicely lining, complete as per specifica | |
| | Qty vide page | |
| | At the rate of | |
| | Item No. 8:- | |
| | Providing and | |
| | on prepared surface of surface and spraying | |

NT BOOK

| ensions | | Contents | Reference to last Measurement |
|---|---|---|---|
| Breadth 5 | Depth 6 | 7 | 8 |
| | | | |
| | | | |
| | | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | mechanical means complete as per specifications. | | | | | | |
| | cross road:- | | | | | | |
| | | 01 | 15.00 | 6.00 | - | = 90.00 | |
| | | 01 | 15.00 | 6.00 | - | = 90.00 | |
| | | 01 | 15.00 | 5.10 | - | = 76.50 | |
| | | 01 | 15.00 | 4.80 | - | = 72.00 | |
| | | 01 | 15.00 | 5.30 | - | = 79.50 | |
| | | 01 | 15.00 | 5.70 | - | = 85.50 | |
| | | 01 | 15.00 | 5.70 | - | = 85.50 | |
| | | 01 | 19.00 | 5.70 | - | = 51.30 | |
| | | | | | | 630.00 sqm | 25156 |
| | At the rate of Rs: 39.93 → | | | | | | 2516788 |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work |
|---|---|
| 1 | 2 |
| | Item No.09:- |
| | Providing and |
| | with 100-120 TPH batch |
| | 75 tonnes per hours use |
| | premixed with bitumi |
| | transporting the hot |
| | paver finisher with |
| | alignment etc., |

ENT BOOK

| imensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|
| h | Breadth 5 | Depth 6 | 7 | 8 |
| ers | specifications. | | | |
| 0 | 6.00 | – | = 90.00 | |
| 0 | 6.00 | – | = 90.00 | |
| 0 | 5.10 | – | = 76.50 | |
| 0 | 4.80 | – | = 72.00 | |
| 0 | 5.30 | – | = 79.50 | |
| 0 | 5.70 | – | = 85.50 | |
| 0 | 5.70 | – | = 85.50 | |
| 0 | 5.70 | – | = 51.30 | |
| | | | 630.00 sqm | + 25156 = 251788 |
| → | | | | |

M. A. R. 57 (Rule 116)
Measurement Book

No. B

263468

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date 1 | Full description, etc, of work 2 | Dimensions Number 3 | Length 4 | Breadth 5 | Depth 6 | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | Item No. 09 – Providing and laying semi dense bituminous concrete 25mm th with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 4.5 to 5% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level & alignment etc., | | | | | | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | cross road:- | 01 | 15.00 | 6.00 | 0.025 = | 2.25 | |
| | | 01 | 15.00 | 6.00 | 0.025 = | 2.25 | |
| | | 01 | 15.00 | 5.10 | 0.025 = | 1.91 | |
| | | 01 | 15.00 | 4.80 | 0.025 = | 1.80 | |
| | | 01 | 15.00 | 5.30 | 0.025 = | 1.98 | |
| | | 01 | 15.00 | 5.70 | 0.025 = | 2.13 | |
| | | 01 | 15.00 | 5.70 | 0.025 = | 2.13 | |
| | | 01 | 9.00 | 5.70 | 0.025 = | 1.28 | |
| | | | | | | 15.75 cum | |
| | At the rate of Rs: | | 9342.14 → | | | 147138.70 | |
| | Item No.03:- providing granite slabs of selected quality roughly | | | | | | |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date | Full description, etc, of work |
|---|---|
| 1 | 2 |
| | dressed and fixed in<br>complete [7.50 cms thic<br>cross road:-<br>Sub roads:- |

## MENT BOOK

| Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|
| ength 4 | Breadth 5 | Depth 6 | 7 | 8 |
| 5·00 | 6·00 | 0·025 = | 2·25 | |
| 5·00 | 6·00 | 0·025 = | 2·25 | |
| 5·00 | 5·10 | 0·025 = | 1·91 | |
| 5·00 | 4·80 | 0·025 = | 1·80 | |
| 5·00 | 5·30 | 0·025 = | 1·98 | |
| 5·00 | 5·70 | 0·025 = | 2·13 | |
| 5·00 | 5·70 | 0·025 = | 2·13 | |
| 7·00 | 5·70 | 0·025 = | 1·28 | |
| | | | 15·75 cum | |
| | 9342.14 → | | | 14738.70 |
| abs of selected | | | quality | roughly |

M. A. R. 57 (Rule 116)
Measurement Book

No. B

263469

Serial No. ..... From..... To.....

Name of Work .....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

| Date 1 | Full description, etc, of work 2 | Dimensions Number 3 | Length 4 | Breadth 5 | Depth 6 | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | dressed and fixed in cement mortar (1:6) including fixing curing etc., complete [7·50 cms thick]. | | | | | | |
| | cross road:- | 02 | 30·00 | 0·90 | - | = 54·00 | |
| | | 02 | 6·00 | 0·90 | - | = 10·80 | |
| | | | | | | 64·80 sqm. | |
| | sub roads:- | 01 | 30·00 | 0·90 | - | = 54·00 | |
| | | | | | TOTAL = | 118·80 sqm. | |
| | At the rate of Rs. | | 671·26 → | | | | 79746·00 |

C/F.C

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು,

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Item No. 13:- | | | | | | |
| | Providing and laying cement concrete using 20mm & down size granite Jelly of ready mix concrete for RCC works laid in 15cm thick layers and well compacted including vibrating curing etc., complete: | | | | | | |
| | | 3 x 2 | 8.00 | 1.80 | 0.23 | = 19.87 cum | |
| | | | | | | | |
| | At the rate of Rs: 6138.89 → | | | | | 121979.70 | |
| | | | | | | | |
| | GRAND TOTAL= | | | | | 9,30098.80 | |
| | | | | | | Rupees Nine lakh thirty one thousand three hundred eight only | 931308- |

C&P
28/12/16
A.E.E.

AE(NP)
28/12/16

Serial No. .....
Name of Work .....
Name of Contractor of nature of Ag
Date of commencement of work ....

| Date | Full description, etc, of wo |
|---|---|
| 1 | 2 |

## EMENT BOOK

| Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|
| Length 4 | Breadth 5 | Depth 6 | 7 | 8 |
| eement concrete using 20mm & | | | | |
| ady mix concrete for RCC works | | | | |
| well compacted including | | | | |
| ·00 | 1·80 | 0·23 = | 19·87 cum | |
| 6138·89 → | | | 121979·70 | |
| GRAND TOTAL = | | | 9,31,308·80 | |
| | | | 931308 — | |

As per N.D

AE(W)
28/12/16

**M. A. R. 57 (Rule 116)**
Measurement Book

**No. B**

263470

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

N

| Date 1 | Full description, etc, of work 2 | Dimensions: Number 3 | Length 4 | Breadth 5 | Depth 6 | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | sub-road: | | | | | | |
| | | | | | | | INDEX: |
| | Cross rd: | | | | | | Asphalt road |
| | SLV School: | | | | | | culvert: |
| | Gangammatemple rd: | | | | | | |
| | | | | | | | SWD |
| | Amruthahalli-tank bund road: | | | | | | |

As per N.D
AE(W)

PLAN

Assistant Executive Engineer
Kodigehalli Sub Division.

# MEASUREMENT BOOK

Royalty charges:

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Sl No. | Description | | Jelly | | Sand | Cement. | |
| | | coeff | qty | coeff | qty | coeff | qty. |
| 07 | WMM - 126.0 cum. | - | 126.00 | | - | - | - |
| 10 | 40mm ↓size - 2.16 cum. | 0.96 | 2.07 | 0.48 | 1.03 | - | - |
| 11 | SSM (1:6) - 34.56 cum. | 1.05 | 36.28 | 0.28 | 9.67 | | |
| 09 | SDBC - 15.75 cum. | 1.40 | 22.05 | - | - | - | - |
| 03 | Granite slabs - 118.80 sqm (7.5 cm th) | 0.075 | 8.91 | - | - | - | - |
| 13 | 20mm ↓size - 19.87 cum. | 0.90 | 17.88 | 0.45 | 8.94 | - | - |
| | TOTAL. | | 213.19 | | 19.64 | | |
| | ABSTRACT | | | | | | |
| 1) | coarse aggregate: | 213.19 cum x | | 108 | cum = | 23024.52.00/- | |
| 2) | fine aggregate: | 19.64 cum x | | 103 | cum = | 2022.92/- | |
| | | | | | | 25.048 | |

Serial No. .....
Name of Work .....
Name of Contractor of nature of Age
Date of commencement of work .....

| Date | Full description, etc, of wor |
|---|---|
| 1 | 2 |
| | Certificate: |
| | 1) Certified that - |
| | 2) Certified that |
| | Rs Lakh - ND |
| | AE(WS) |

T BOOK

| nsions | | Contents | Reference to last Measurement |
|---|---|---|---|
| Breadth 5 | Depth 6 | 7 | 8 |
| Sand | | Cement. | |
| coeff | qty | coeff | qty. |
| | – | – | – |
| 0.48 | 1.03 | – | – |
| 0.28 | 9.67 | | |
| – | – | – | – |
| – | – | – | – |
| 0.45 | 8.94 | – | – |
| | 19.64 | | |
| 108 | cum= | 2302452.60/- | |
| 103 | cum= | 2022.92/- | |
| | | 25.048 | |

**M. A. R. 57 (Rule 116)**
Measurement Book

**No. B**

263471

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

| Date 1 | Full description, etc, of work 2 | Dimensions: Number 3 | Length 4 | Breadth 5 | Depth 6 | Contents 7 | Reference to last Measurement 8 |
|---|---|---|---|---|---|---|---|
| | Certificate: | | | | | | |
| | 1) Certified that the workdone by the contractor is satisfactory: | | | | | | |
| | 2) Certified that debris has been removed from the work spot. | | | | | | |
| | AE(W9) | | | | | | |
| | Assistant Executive Engineer<br>Kodigehalli Sub Division,<br>Yelahanka Zone, B.B.M.P.,<br>Bangalore. | | | | | | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | | | | | Total Rs: 931308-00 | |
| | | | | | | ST - 9313-00 | |
| | | | | | | VAT - 37252-00 | |
| | | | | | | Cess - 9313-00 | |
| | | | | | | CBF - 931-00 | |
| | | | | | | LR - 25048-00 | |
| | | | | | | Penalty - 18775-00 | |
| | | | | | | Adj. 93,632-00 | |
| | | | | | | Total 8,37,676-00 | |

ಬಿಲ್ಲು ಮೊಬಲಗು ರೂ 931308-00

ಗಳಿಗೆ ಪಾಸು ಮಾಡಿದೆ : ಇದರಲ್ಲಿ ರೂ 93632-00

ಹೊಂದಾಣಿಕೆ ಮಾಡಿಕೊಂಡು ಉಳಿದ ಮೊಬಲಗು 837676-00

ರೂ Eight Lakhe Hixty Seven Hound Six hundred Seventy Six only.

ಚೆಕ್ ಮುಖಾಂತರ ನೀಡಬಹುದೆ

ಲೆಕ್ಕಾಧೀಕ್ಷಕರು

ಕಾ ಪ ಇ 16/6/

ವ್ಯವಹಾರ ಸಹಾಯಕ

ಸಹಾಯಕ ಅಭಿಯಂತರರು

ಶಾಖಾ ಸಹಾಯಕ

ಶಾಖಾ ಅ.ಪಾ

Serial No. .....

Name of Work .....

Name of Contractor of nature of Age

Date of commencement of work .....

| Date | Full description, etc, of wo |
|---|---|
| 1 | 2 |